

PERSONALITY TYPE PREFERENCES OF JUVENILE DELINQUENTS

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The purpose of this study was to identify and explore personality characteristics of juvenile delinquents, to compare those characteristics with those of the general population, and determine if there are significant differences, as measured by the Myers-Briggs Type Indicator (MBTI), between the personality characteristics of juvenile delinquents and the general population.

Juvenile delinquents who were adjudicated into a Texas Youth Commission facility in North Texas were subjects for this study. Participants included 186 males who ranged in age from 14 years to 20 years. Statistical analyses were performed for each of the research questions.

When comparing MBTI scores of juvenile delinquents to the general population, significant differences were found on the dichotomous scales, temperaments, function pairs, and types. All type preferences are represented within the juvenile delinquent population. The MBTI can be useful in responding to the education and rehabilitation needs of juvenile delinquents. Knowledge of personality type can help caregivers meet the needs of juvenile delinquents.

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CHAPTER 1

INTRODUCTION

Increasing numbers of children and adolescents are being adjudicated into the juvenile justice system. Some of the factors leading to this are increasing numbers and increasing severity of crimes committed by juveniles; increases in maladaptive behaviors caused by prenatal exposure to drugs; and an increasingly violent society. Furthermore, alternative educational placements for students who break rules or commit crimes are now mandated by federal and state governments (PL 105-17, Individuals with Disabilities Education Act Amendments of 1997). Not long ago, "really bad kids" were sent to prison and "not-so-bad-kids" dropped out of school (Wood, Brendtro, Fecser, & Nichols, 1999). Taken together, these recent phenomena mean that more students whose behavior is deemed unacceptable to society are being educated in special programs, separate schools, or behind razor wire fences. As Kauffman (1999) said, "Our society does not like children with conduct disorders" (p. 41).

When Congress passed PL 94-142, the Education for All Handicapped Children Act in 1975 it provided for a free, appropriate public education in the least restrictive

environment. It also specified that educators develop an individualized education program (IEP) plan for all students classified as special education students.

Various studies showed that many young adults with disabilities were (a) not employed, (b) not living independently, (c) not integrated into the community, and (d) not satisfied with their lives (e.g. Chadsey-Rusch, Rusch, & O'Reilly (1991); Edgar, Levine, & Maddox, 1986; Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985; Wagner, 1989; Wehman, Kregel, & Seyfarth, 1985).

After the passage of the Carl Perkins Act of 1984 Congress suggested individualized transition plans be added to the Education for All Handicapped Children Act in PL 99-457 (D'Amico & Marder, 1991). The impetus for the transition plan was a series of follow-up studies that showed only a few youths with disabilities were employed after leaving school and that they were even less integrated into employment, independent living, and community activities as they aged (Chadsey-Rusch, Rusch, & O'Reilly, 1991).

However, when President George Bush signed PL 101-476, the Education of the Handicapped Education Act (EHA) Amendments of 1990, into law on October 30, 1990 several

sweeping changes were made to PL 94-142 (Individuals with Disabilities Education Act). The name was officially changed to the Individuals with Disabilities Education Act (IDEA). Other changes included mandating that an Individualized Transition Plan (ITP) is drawn up for each child by the age of 16. Under the IDEA Amendments of 1997, the multi-disciplinary team that develops the IEP for each student must begin working on the ITP when the student reaches the age of 14.

In their 1991 study, Chadsey-Rusch, Rusch, and O'Reilly revealed that young people with disabilities had only a 35 percent chance of obtaining full-time employment after leaving school and that this percentage dropped with time. Even the youths who did find employment were underemployed with 75 percent of those who did obtain employment earning minimum wage or less. They also reported that young people with special education labels live less independently than their non-disabled counterparts. They were less likely to be married, less likely to have friends, and more likely to be arrested than young adults of the same age who did not have disabilities. They reported being lonely and wishing they had more time to spend with their friends.

Unfortunately, the prospects for improvement do not appear to brighten over time. There is a gradual decline in the employment rate because some young adults with disabilities lose jobs that they obtained as part of a high school vocational program (D'Amico & Marder, 1991). Also, many youths with learning disabilities return home after failing at living independently and many are fired from their jobs. Most of the job terminations were due to a lack of social skills (Chadsey-Rusch, Rusch and O'Reilly, 1991).

However, students with learning disabilities have a better chance of a positive outcome than do their counterparts with other disabilities. For example, Parish (1992) reported that graduates with mental retardation encountered more trouble in adjusting to adult life than their counterparts with learning disabilities. Although students with learning disabilities have a statistically pitiful future, others are even worse. As Wagner et al. (1991) said, "adolescence is difficult - especially for youths with disabilities" (p. 3).

The worst outcomes are reserved for those classified as emotionally disturbed. Children with emotional and behavioral disorders: (a) do not do well academically; (b) lack social skills; (c) tend to earn less; (d) are more

likely to drop out of school (Knitzer, Steinberg, & Fleisch, 1990). Compared to other students with disabilities, students with emotional disturbances (ED), whether in regular education placements or special education placements, have the lowest grades, fail more courses, are retained at the same grade more frequently, are absent more often and drop out more frequently (Wagner et al., 1991). Furthermore, these are in comparisons with students with other disabilities. If compared with non-disabled peers, the discrepancies are even greater. Of all children who carry the label emotionally disturbed (ED), only 42 percent graduate from high school, 56 percent drop out of school, and 58 percent of students labeled ED are arrested within five years of leaving school (Osher & Hanley, 1996a) and 73 percent of those who drop out are arrested within five years (U. S Department of Education cited in Osher & Hanley, 1996b). It is obvious that traditional school approaches for students with emotional and behavioral disorders have not worked.

Even for students who are adjudicated into juvenile justice facilities, there is no magic cure. Failure and frustration often characterize treatment of delinquent adolescents. Often, teachers, counselors, and therapists in

residential facilities are seen as extensions of the establishment and are tolerated only to placate the judge and supervisors (Godbey, 1975).

Juvenile delinquents who are adjudicated are hostile to society, and by the time they reach juvenile justice facilities, often society is hostile toward them. These adolescents are removed from their families and communities and become part of a peer group identified primarily for maladaptive behavior. After release, these youths return home to find that peers and even family members have closed ranks and are suspicious. The only group that is accepting will likely be the negative peer group or gang that helped get them in trouble in the beginning. During this probationary period, even normal adolescent adventure may result in recommitment to an institution (Godbey, 1975).

There must be some way to break this cycle. Schools and juvenile detention facilities need to reach a greater understanding of children and youths who become juvenile delinquents in order to meet their needs and break this chain of events through rehabilitation. One manner of achieving a better understanding of self and others is type theory or typology.

In the early 1900s, Carl Gustav Jung, a Swiss psychiatrist, developed the concept of psychological type to explain natural differences in human behavior. Isabel Myers (1985) stated, "The essence of the theory is that much seemingly random variation in human behavior is actually quite orderly and consistent, being due to certain basic differences in the way people prefer to use their perception and judgment" (Myers & McCaulley, 1985, p. 1). Jungian type theory has provided the theoretical base for one system of identifying attitudes and motivation patterns in people (Lawrence, 1993).

According to type theory, individuals have preferences for processing information and interacting with others. Type theory assumes that if people experience things differently, their attitudes, assumptions, and actions will vary. In most cases, this happens without the person being aware of it. Type theory does not assess or evaluate personalities; rather it proffers a detailed description of tendencies and potentialities as well as orientations to time and space. The patterns that Jung identified explained how people perceive information and how they reach decisions about it. Each type is characterized by a basic perceptual set. This perceptual set affects understanding

and dealing with reality. The perceptual set also influences the student's interaction in the classroom (Williams, 1992).

Influenced by Jungian theory, Elizabeth Myers developed the Myers-Briggs Type Indicator (MBTI) during the 1950s. Each individual's particular set of attitudes, assumptions, and actions make up that person's type. Typology does not diagnose, assess, or evaluate personalities. Typology does offer a detailed description of certain tendencies and potentialities, as well as certain orientations to time and space. The patterns that Jung identified describe how people perceive information and come to decisions about that information. Myers (1985) said that individuals have a natural preference for one pole or the other on each of four dichotomous scales just as they have a natural preference for right or left handedness.

According to Jung (1923), the four basic mental processes are sensing, intuition, thinking, and feeling. He also held that there are two basic attitudes toward the world: extraversion and introversion. Jung (1971) said that the extraversion/introversion preference combines with the sensing/intuition preference and the thinking/feeling

preference to yield eight possible combinations. Myers (1962) said another index was implicitly present in Jung's work. That index was the judging/perceiving index. Together, these four scales combine to generate a total of sixteen types. Each of these types has its own characteristics and gifts, its own road to excellence, and its own set of pitfalls to avoid (McCaulley, 1981). Preferences along these dichotomous scales are measured on the MBTI.

The variables measured by the MBTI have been shown to be related to academic success, learning styles, behavior, differences in interests, values, and use of problem-solving techniques (Godbey, 1975). According to Godbey, the "major facet of the problem with juvenile delinquency is the identification of those adolescents in need of guidance or even therapy before they join the ranks of the delinquents" (p 2). If those at high risk for eventual delinquency can be determined, those individuals can be brought into focus for the efforts of mental health professionals and other applicable agencies thus reducing the high personal and societal costs associated with delinquent behavior.

It is possible that delinquent behavior is related to the adolescent's personality, how the mind is used, and familial and societal influences. If personality differences between delinquent and non-delinquent adolescents as measured by the MBTI could be identified, then the resulting information could be useful. Because it is a benign instrument, with no negative connotations, information from the MBTI would not have the potentially detrimental and stigmatizing effects of other testing commonly used with delinquent populations. Rather, as a benign instrument, the MBTI could be used to provide guidance, counseling, rehabilitation, and education programs that assist adolescents in understanding of self and others, capitalizing on strengths, and learning to deal with conflicts peacefully.

Instruments that have found the most widespread acceptance for searching for individual differences within prison settings include the Minnesota Mutiphasic Personality Inventory (MMPI) (Hathaway et al. 1989) and the California Personality Inventory. Haythorn, McCaulley, and Natter (1976) reported that these types of tests share a strong empirical derivation and an emphasis on deviancy. They also said these characteristics reflect the well-

recognized need to validate measures empirically and the overall concern of those developing the instruments with personality, behavioral, and learning disorders. Instead, Haythorn et al. said that a benign instrument that offers insight on differences rather than deviation could be beneficial.

As little research has been conducted with the MBTI and delinquent populations, and since the aforementioned potential benefits can go far in stemming the problems of educating students with emotional and behavioral disorders as well as rehabilitating juvenile delinquents, a study utilizing the MBTI with juvenile delinquents is needed.

Purpose of this Study

The purposes of this study are to: (a) identify and explore the personality characteristics of selected juvenile delinquents; (b) compare and contrast these characteristics with those of the general population; and (c) determine if there are significant differences, as measured by the MBTI, between the personality characteristics of juvenile delinquents and those of the general population.

Research Questions

The research questions for this study investigate the personality type preferences of juvenile delinquents, comparing and contrasting these characteristics with those of the general population, and determining if significant differences exist. Specific research questions are as follows:

1. Is there a difference as measured by the Extraversion and Introversion scale of the MBTI between the scores of juvenile delinquents and those of the general population?
2. Is there a difference as measured by the Sensing and Intuition scale of the MBTI between the scores of juvenile delinquents and those of the general population?
3. Is there a difference as measured by the Thinking and Feeling scale of the MBTI between the scores of juvenile delinquents and those of the general population?
4. Is there a difference as measured by the Judging and Perceiving scale of the MBTI between the scores of juvenile delinquents and those of the general population?
5. Is there a difference in temperament as measured by the MBTI between the temperaments of juvenile delinquents and those of the general population?

6. Is there a difference in function pairs as measured by the MBTI between those of juvenile delinquents and those of the general population?
7. Is there a difference in personality type as measured by the MBTI between the type indicators of juvenile delinquents and those of the general population?

Significance of the Study

A review of literature relevant to juvenile delinquents, emotional disturbances, and behavior disorders reveals the dismal educational outcomes of these students. Reportedly, these students have worse outcomes than any other disability category.

An understanding of personality factors is important if educators want to serve this most needy population. By examining closely the behaviors, feelings, and personalities of juvenile delinquents, better educational programs may be developed to meet diversified needs. An important component of any program for juvenile delinquents is that of helping the students understand themselves and others. These self-esteem and empathy factors can be enhanced through an understanding of talents, abilities, interests, values, strengths, and weaknesses as revealed by the MBTI.

In addition, the study should yield validated statistical data that are useful to personnel who work with juvenile delinquents. The information can be used in identification, evaluation, and education of such students.

Methodology

This study utilized the MBTI. The personality types of a selected group of juvenile delinquents were compared with those of the general population. The study explored the possible relationships between type and juvenile delinquency. Specific concerns were population and sample, data collection, and analysis of the data.

Population and Sample:

The population was juvenile delinquents who had been adjudicated into a state juvenile detention facility. The researcher received approval from Texas Youth Commission to administer the MBTI to a sample of 186 students. Subjects solicited were those attending school at the facility and reflected the full range of social, economic, and ethnic variables that are typical. All students who attended school at the facility were given the opportunity to volunteer to take the MBTI.

Data Collection:

The researcher traveled to the facility. The boys were brought, by dormitory units, into a classroom at the school. A brief introduction to type theory was given and type preferences of several famous people were presented. The students were then given the choice of participating or not participating in the study. Instructions were given and students who had difficulty reading were allowed to use a tape-recorded version of the MBTI.

Analysis of the Data:

Responses to the MBTI were computer scored at the Center for the Application of Psychological Type. Results were summed separately for each dichotomous index: extraversion/introversion, sensing/intuition, thinking/feeling, and judging/perceiving. These consist of eight numerical values, two for each scale. The larger number represents the individual's preference. With the entire type dimension preferences determined, the four letters representing each preference identifies each subject's preference type. Data were analyzed via chi-square goodness-of-fit and independent t-tests. Research questions one, two, three, and four were analyzed via independent t-tests. Additionally, chi-square goodness-of-

fit analysis was performed on each of the questions. Research questions five, six, and seven were analyzed via chi-square goodness-of-fit. Significant differences were established a priori at the $p < .05$ level of confidence.

Basic Assumptions

The following assumptions are recognized as factors affecting the results of this study: (a) Type as described by Jung, Myers, and Briggs can be measured; (b) The MBTI provides a reasonable construct of type dimensions; (c) Under the right conditions, juvenile delinquents will indicate psychological type preferences honestly and completely; (d) Under the right conditions, juvenile delinquents will complete the paper and pencil self-report assessment conscientiously.

Limitations of the Study

This study is limited by the following restrictions:

1. The population is limited to juvenile delinquents confined in a state juvenile detention facility in North Texas.
2. Generalization of the data is limited to the extent that students involved in this study are representative of other juvenile delinquents.

3. Measurement of type is limited by acceptance of the limitations of the instrument's validity and reliability and by the degree to which students complete the pencil and paper self-report assessments conscientiously and honestly.

Definition of Terms

Extraversion - "Attention seems to flow out, or to be drawn out, to the objects and people of the environment. There is a desire to act on the environment, to affirm its importance, to increase its effect" (Myers & McCaulley, 1985, p. 13).

Introversion - "Energy is drawn from the environment, and consolidated within one's position. The main interest of the introvert are in the inner world of concepts and ideas" (Myers & McCaulley, 1985, p. 13).

Sensing - Individuals use the five senses to perceive information from the world. Sensing is the preference for working with known facts rather than looking for possibilities and relationships. "Sensing types tend to accept and work with what is 'given' in the here-and-now, and thus become realistic and practical. They are good at remembering and working with a great number of facts" (Myers & McCaulley, 1985, p. 5).

Intuition - Individuals rely on a "sixth sense" to perceive information about the world. Intuition is the preference for looking for possibilities and relationships. Intuition "shows you the meanings, relationships, and possibilities that go beyond the information from your senses. Intuition looks at the big picture and tries to grasp the essential patterns" (Myers & McCaulley, 1985, p. 5).

Thinking - Individuals process information objectively. Thinking is the tendency to base judgments more on impersonal analysis and logic than on personal values. "Thinking predicts the logical consequences of any particular choice or action. People with a preference for thinking seek an objective standard of truth" (Myers & McCaulley, 1985, p. 6).

Feeling - Individuals process information from a personal perspective. An individual's value system influences the decisions made. Feeling is the tendency to base judgments on personal values rather than analysis and logic. "Feeling considers what is important to you and to other people [without requiring that it be logical], and decides on person-centered values..." Feeling, as used here,

means making decisions based on values. It does not refer to feelings or emotions. (Myers & McCaulley, 1985, p. 6).

Judging - A judging person "is concerned with making decisions, seeking closure, planning operations, or organizing activities" (Myers & McCaulley, 1985, p. 14). The judging attitude is the preference for a planned, decided, orderly way of life.

Perceiving - A perceiving person "is attuned to incoming information.... Persons who characteristically live in the perceptive attitude seem in their outer behavior to be spontaneous, curious, adaptable, open to new events and changes, and aiming to miss nothing" (Myers & McCaulley, 1985, p. 14). The perceiving attitude is a preference for living life in a spontaneous and flexible way.

Type - The description of the individual's preferred method of perceiving and processing information and relating to the world. Type is defined in terms of the categories indicated on the MBTI.

Temperament - Four combinations (NT, NF, SJ, and SP) that yield different temperaments (Keirsey & Bates, 1978).

Function pairs - Four combinations (NF, NT, ST, and SF) that produce distinctive behavior patterns (Myers & McCaulley, 1987; Lawrence 1982).

APT - The Association for Psychological Type was founded in 1979 "for the purpose of fostering the study and understanding of psychological type and to encourage its application in various areas of human affairs, including the promotion of personal and interpersonal growth and development" (APT Directory, 1984, p. i).

CAPT - The Center for Applications of Psychological Type is "a nonprofit organization created in 1975 by Isabel Briggs Myers and Mary McCaulley to extend and teach the accurate understanding and ethical and practical use of the MBTI and Jung's theory of psychological type" (Consulting Psychologists Press, 1991, p. 30).

Behavior Disorder - A term used typically in research to encompass the federal definition and various state definitions of emotionally disturbed.

Conduct Disorder - A DSM-IV term encompassing many facets, but the "essential feature of this disorder is a persistent pattern of conduct in which the basic rights of others and major age-appropriate societal norms or rules are violated." (American Psychiatric Association, 1994, p. 53).

Emotionally Disturbed - The federal category for special education students with emotional and behavioral

disorders as defined by the Individuals with Disabilities Education Act (IDEA, 1975).

Juvenile Delinquent - For the purposes of this study, any youth who has been adjudicated into a state facility will be considered a juvenile delinquent.

CHAPTER 2

REVIEW OF THE LITERATURE

Despite the history and popularity of the Myers-Briggs Type Indicator (MBTI), a review of literature reveals that there is a dearth of information available on the use of the MBTI as it pertains to special education. In addition, even more lacking is information regarding personality preferences of students with emotional and behavioral disorders. Searches of electronic and online databases such as `ERIC and Electric Library as well as manual searches of journals and dissertations referenced in related articles revealed that there is a tremendous amount of information on the use of the MBTI in education. However, little of the information deals with students with special needs. Further analysis reveals that when exceptional students are discussed, they are generally students who carry labels of Gifted and Talented or Learning Disabled.

Personality

Personality is a construct that is difficult to define. There has been a myriad of definitions, diverse in variety and multitudinous in number, used throughout the years. Allport (1973) traced the history of the concept of personality back to the early antecedent persona, the

theatrical mask originally used in Greek drama. Allport documented more than fifty meanings for personality in fields including theology, philosophy, sociology, linguistics, and psychology. Hall and Lindzey (1978) stated that "no substantive definition of personality can be applied with generality" (p. 9). Rather, personality is better defined by the particular concepts that are inherent in the theory of personality used by the observer. Personality is a result of both genetics and experiences.

Myers (1980) in the book, Gifts Differing, explained personality differences by means of personality development, learning styles, academic and career choices, interpersonal relationships, and the individual's approach to the world. Myers said that major personality differences are manifest in the various ways people process information. This is seen in the manner in which persons perceive and make judgments. According to Myers, personality type is innate and is either fostered or hindered by environmental circumstances just as other innate abilities.

Type Theory

Type theory or trait psychology is one approach to the theory and measurement of personality. It is rooted in the

concept of trait as a fundamental unit. A trait is a predisposition to behavior that is enduring and wide-ranging. Lanyon and Goldstein (1982) explain that traits have temporal consistency and cross-situational consistency. Type theory holds that apparently random variations in human behavior are actually systematic and stable. In developing type theory, Jung attempted to conceptualize personality differences that he observed among patients and colleagues.

Type theory also assumes that individuals possess an inherent preference for some functions over others. Appropriate type development allows the person to use and develop those functions which are most favored and trusted. However, just as the environment can foster development of the favored functions, it can also discourage this development by reinforcing activities that are less satisfying and motivating to the person. This can result in falsification of type, leaving the individual feeling less content and less competent due to the required use of the less favored functions (Gibb, 1989). Myers and Myers (1980) said that feelings of guilt and incompetence could be the logical consequences of poor type development. Furthermore, they point out that thwarting type development impedes

ability and happiness. This is analogous to the horror stories of teachers earlier in this century forcing left handed students to become right handed.

In Psychology Types, Jung (1923) relied mainly on clinical insights. Isabell Briggs Myers worked more than forty years developing an instrument to reliably determine type (McCaulley, 1978). This instrument, the Myers-Briggs Type Indicator (MBTI) has become accepted as a valid, reliable instrument with which to measure personality type.

Based on Jung's research early in the twentieth century, Isabel Myers stated that the essence of type theory is that seemingly random variation in human behavior is, in actuality, orderly and consistent and is due to certain basic differences in the way people prefer to use perception and judgment (Myers & McCaulley, 1985). Jung's (1923) type theory has provided the theoretical base for a system of identifying attitudes and motivational patterns in people (Lawrence, 1993). According to type theory, people have preferences for processing information and interacting with others. Type theorists assume that if people experience things differently, their attitudes, assumptions, and actions will vary whether or not they have an awareness of it (Williams, 1992). Each individual's

particular set of attitudes, assumptions, and actions make up that person's type. Typology does not diagnose, assess, or evaluate personalities. Typology does offer a detailed description of certain tendencies and potentialities, as well as certain orientations to time and space. The patterns that Jung identified describe how people perceive information and come to decisions about that information. Each personality type is characterized by a basic perceptual set that affects how an individual understands and deals with reality.

Myers (1985), based on Jungian theory, proffered that individuals have a natural preference for one pole or the other on each of four scales just as they have a natural preference for right or left handedness. According to Jung (1923), the four basic mental processes are sensing, intuition, thinking, and feeling. He also held that there are two basic attitudes toward the world: extraversion and introversion. Jung (1971) said that the extraversion/introversion preference combines with the sensing/intuition preference and the thinking/feeling preference to yield eight possible combinations. Myers (1962) said another index was implicitly present in Jung's work. That index was the judging/perceiving index.

Together, these four scales combine to generate sixteen types. Each of these types has its own characteristics and gifts, its own road to excellence, and its own set of pitfalls to avoid (McCaulley, 1981).

Jungian theory includes four processes that everyone uses though everyone has not developed them equally. Preferences are made based on attitudes associated with each process. People are motivated to use the process they tend to prefer. By repeated practice, expertise develops in activities for which preferred type preferences are most useful (Jung, 1971). Preferences develop into habits, attitudes, and traits.

A preference for extraversion (E) is characteristically seen as sociability and the ease of communication with others. Individuals with a preference for extraversion develop a strong awareness of and reliance upon the environment for stimulation. They favor an action orientation when meeting new events. Attention tends to focus outward toward people and objects in the environment. The extravert prefers interaction, quick action, and communication (Jung, 1971; Lawrence, 1984).

A preference for introversion (I) leads to characteristics such as thoughtfulness, contemplative

detachment, and interest in the clear conceptualization of ideas. The introvert spends time thinking and prefers to limit socialization to family and close friends. Introverts are relatively unaware of changes in outer situations and discount their importance in most decisions. Introverts also have a great capacity for sustained attention and an extra ability to delve deeply into complex issues. Privacy and time for in-depth search are important to introverts (Jung, 1971; Lawrence, 1984).

A preference for sensing (S) can be characterized by one who prefers to rely on experience rather than theory. Sensing types perceive the immediate, real, and practical facts of experience and life. They trust the conventional and traditional. The sensing type prefers using the five senses and thereby develops an expertise in observational skills and a memory for facts and details. Each new fact is weighed against experience. Practical application and tangibles are more important than theory or insight (Jung, 1971; Lawrence, 1984).

A preference for intuition (N) is in direct contrast. Intuitive types prefer to deal with conceptual, theoretical, and symbolic relationships. Intuitive types also tend to have a capacity to envision future

possibilities and be quite creative. This preference denotes a reliance on inspiration and an interest in the new and unexplored. They may act spontaneously on hunches from the unconscious and prefer to deal with abstractions, hidden possibilities, and inferred meanings. One attitude characteristic of intuitive types is a reliance on inspiration rather than experience (Jung, 1971; Lawrence, 1984).

A preference for thinking (T) is characterized by logical decision making with impersonal feelings. People who prefer thinking make decisions and judgments objectively and impersonally while carefully analyzing causes and consequences. Thinkers desire logic and consistency and characteristically have attitudes of objectivity, impartiality. They also have a strong sense of fairness and justice and are skilled at applying logical analysis. Individuals with a strong preference are attracted to areas in which technical skills and objectivity are needed (Jung, 1971; Lawrence, 1984).

In contrast, a preference for feeling (F) that bases judgments on a system of personal values and standards built on knowledge of priorities that matter the most to the individual. This preference makes decisions

subjectively and personally, carefully weighing the values associated with each choice. The feeling preference type tends to have a high degree of empathy and understanding for others. Feelers have a strong desire for harmony, warmth, and compassion. People with a feeling preference are attracted to people professions. They often find that communication and interpersonal skills are more interesting than technical skills (Jung, 1971; Lawrence, 1984).

Judging and perceiving are the preferred ways of dealing with the outer world as measured by the MBTI. Myers (1962), who said judging/perceiving was implicit in Jungian type theory, developed this dichotomous scale. The judging (J) type tends to be organized and systematic, preferring an orderly planned way of life. Judging types are noted for being responsible, dependable, and decisive (Myers & McCaulley, 1985).

The perceiving (P) types are more curious and open minded. They gather information and delay decisions. A lack of closure does not present an obstacle as it would to judging types. Perceptive types are highly adaptable and have the ability to adjust to changes. Those with the perceptive preference approach life in a spontaneous, flexible manner, while attempting to understand life and

adjust to its varied demands. Perceptive types are seen as receptive, understanding, adaptable, and flexible (Myers & McCaulley, 1985).

The Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI) is a paper and pencil, self-report instrument developed by Isabel Briggs Myers and Katharine Briggs over a twenty-year period. It was first published in 1962 and has become the most widely used personality type instrument in the world. The theories from this instrument have been applied to education, careers, the work place, and marriage (Lawrence, 1993). The MBTI was developed to put Jung's theory of psychological type into practical applications (Myers & McCaulley, 1985).

The MBTI has been validated and tested for reliability. The estimates of internal consistency for the continuous scores of the four MBTI scales are acceptable for most adult samples (Myers & McCaulley, 1985). Myers used a split-half reliability technique to determine the reliabilities of the scales and reported that almost all of the split-half coefficients for the scales across various groups exceeded .75 (Myers, 1962). The reliability figures are less for younger samples and for other populations who can be considered to be performing at lower levels of

achievement. Reliability coefficients have ranged from .55 to the .89. Test-retest reliability of the MBTI shows consistency over time. When subjects report a change in type, it most often occurs in one preference and in scales where the initial preference score was low. Type tables themselves provide support for construct validity. For example, in the occupational type distributions specific types are significantly more likely to have a certain occupation (Myers & McCaulley).

Myers (1962) also verified the construct validity of the MBTI by performing correlation studies with other well-known, validated personality measures. Correlations were generally significant at the $p < .05$ or $p < .01$ level. McCaulley (1978) identified five aspects of the MBTI that make it a desirable construct for identifying type preferences:

1. It is self-administered.
2. Items are relatively free of value-laden questions, ambiguity, and threatening questions.
3. It can be scored by hand or computer.
4. Respondents are interested in the interpretation, which is readily available to them.
5. Cost is not prohibitive.

The MBTI utilizes four dichotomous traits to operationally define temperament (Horton & Oakland, 1997). Those traits are extraversion (E) and introversion (I), sensing (S) and intuition (N), thinking (T) and feeling (F), and judging (J) and perceiving (P). A continuous-scale score derived from the self-report test determines an individual's preference for each of these variables. Keirsey and Bates (1984) derive four basic student temperaments from combinations of these preferences. SJ students value belonging through serving others. They value following traditions and acting responsibly and conservatively. SP students value freedom and spontaneity. They act on impulse and enjoy playing and being free of constraints. NT students value competence. They have a desire to learn, to know, to predict, and to control. NF students value personal growth. They want to self-actualize, to display integrity, and to promote harmony (Horton & Oakland).

Ingrained within and throughout the MBTI is Jungian Theory. According to Carl Jung (1971), people's behavior follows patterns. He called these patterns psychological types. Jung's theory presumes that supposedly random behavior is in actuality systematic and consistent. The

differences in people's behavior are caused by the way individuals prefer to perceive and decide upon their situations. People making similar choices may have different motivations (Myers & McCaulley, 1985).

Jung's theory describes how people unconsciously assume that others perceive things the same way they do (Myers & McCaulley, 1985). Type theory proposes that each person's psychological make-up is innate and unchangeable (Lawrence, 1993). The work of Carl Jung and Isabel Briggs Myers identified eight preferences: extraversion/introversion (E/I); judging/perceiving (J/P); sensing/intuitive (S/N); and thinking/feeling (T/F). These preferences are combined to make 16 different psychological types. Some of these type preferences begin to manifest themselves during childhood and continue developing throughout the lifespan (Murphy, 1992).

Despite the recent avalanche of articles looking at personality type as the latest wrinkle in learning style theory (e.g. Ferdman, 1993; Horton & Oakland, 1997; Matthews, 1996) personality type is much further reaching than classroom learning style preferences. Personality type theorists hold that temperament and therefore behavior is as inborn as eye color or other traits (Keirsey & Bates,

1984). Type is fundamentally unchanging from childhood to adulthood (Lawrence, 1993). Moreover, type extends beyond the classroom into all areas of one's interaction with the world (Pedersen, 1993).

However, much of the research does point to correlations between type styles and academic achievement. Fourqurean, Meisgeier, Swank, and Murphy (1988) sum it up as follows:

The consistent indications are that the S-N scale and the E-I scales are related to educational functioning with extraversion and intuition being advantageous for academic ability and achievement. To a lesser extent, the J-P scale has been linked to educational functioning with a preference for perception being advantageous. (p. 38)

Myers and McCaulley (1987) relate type theory to three aspects of educational achievement: aptitude, application, and interest. They reported that intuitive types have a relative advantage over sensing types because their interests most closely match traditional academic tasks. Judgers also have an advantage in that they are better able to focus their energies and persist with a task than their perceiving counterparts.

Additionally, the MBTI Manual (Myers & McCaulley, 1987) reports numerous studies that show that various types have preferences for and are able to learn better with certain types of instruction. Sensors do better with visual instruction and like to work in a systematic way. Introverts do not do well with experiential training and are often seen by their peers as not participating. However, McCaulley and Natter (1980) reported that the sensing/intuition scale is the most consequential for educational programs because education so heavily relies on the intake of data.

Type Preferences of Students with Special Needs

Although there has been little research done on using the MBTI with students with special needs, one study did reveal a significant overrepresentation of sensing types among special education students who were disaggregated from a larger sample of students. This study sought to determine if students with emotional and behavioral disorders might also deviate from the normal distribution of type preferences as reported by Myers and McCaulley (1987). Williams (1992) reported that, among younger children, children labeled as gifted and talented were almost always Es while children with learning disabilities

were almost always Is. They also reported that special education students preferred Sensing to Intuition significantly more than could be normally expected.

The MBTI in Prison Settings

The body of literature concerning the use of the MBTI in prison settings is indeed frail. Usually, upon arrival to such facilities, tests such as the Minnesota Multiphasic Psychiatric Inventory and intelligence tests are administered. In juvenile jails, where education of inmates is to be continued, reading level tests are also administered.

In a 1981 study, Linton and Whitehead (as cited in Gibb, 1989) used the MBTI in an Illinois jail in an attempt to improve the self-understanding of inmates. They found the population heavily introverted and sensing. They also found a tendency toward the preferences of thinking and perception.

Godbey, in a 1975 study that compared juvenile delinquents with a control group of non-delinquents, found that among the white subpopulation in the study, introverts were overrepresented. Godbey also found an overrepresentation of sensing types.

Lippin (1990) in a study of women in prison found that ISTJ, ISFJ, and ISTP were significantly overrepresented, while ESFJ and ENFJ were significantly underrepresented. In a partial replication of Lippin's study, Long, Lenoir, Phung, and Witherspoon (1995) also found an overrepresentation of ISTJ, ISFJ, and ISTP types and an underrepresentation of ESFP and ESFJ types in a sample of 108 incarcerated women.

Haythorn, et al. (1976) found an overrepresentation of introverts. They also found an overrepresentation of sensing types when compared to the large normative group, population of male students pursuing a college preparatory program, available in the MBTI manual. When compared to this group, they also found an overrepresentation of thinking types and judging types. Additionally they found that IJs were significantly overrepresented. McCaulley and Smith (1974) (as cited in Haythorn, et al.) reported that IJs would theoretically be less sensitive and less adaptable to external realities and as such would be less amenable to the demands of society. They also found an overrepresentation of NT and ST types. In almost every category, this study found larger differences between the imprisoned sample and the college-preparatory normative

group than between the imprisoned sample and the non-college-preparatory normative group.

Livernoise (1987) reported an overrepresentation of ISFP and ISTP types in the Orange County Jail as well as an underrepresentation of ENTJ, INTJ, and ESTJ types. He also reported an overrepresentation of SP temperament styles and an underrepresentation of NT temperament styles.

Lippin (1991) conducted and reported on a type preference workshop with women in prison. She said that the workshop itself had a positive impact, but she saw the benefits as much further reaching than that. "There is the obvious potential for using personality type in prison programs. MBTI results can be helpful in counseling, vocational training, education, roommate selection, staff training, and rehabilitation programs" (p 15). Indeed, as Lippin points out, although type theory has been around for decades little is known about the type behaviors of that large percentage of our population who do not experience privilege, "but instead live with daily survival concerns and dysfunctional relationships" (p 15).

CHAPTER 3

METHOD OF PROCEDURE

Chapter Three includes the statement of purpose of the study and a description of the research instrument. Validity and reliability of the research instrument is reported. Descriptions of the subjects, instruments, data collection methods, and data treatment methods are also provided.

Purpose of the Study

The purposes of this study are to (a) identify and explore the personality characteristics of selected juvenile delinquents; (b) compare and contrast these characteristics with those of the general population; and (c) determine if there are significant differences, as measured by the Myers-Briggs Type Indicator (MBTI), between the personality characteristics of juvenile delinquents and those of the general population.

Description of Subjects

The sample for this study was 181 adolescent male juvenile delinquents who were placed through the juvenile justice system into a Texas Youth Commission facility in North Texas. All subjects in the school were given the choice of participating in the study. The MBTI was

administered to all participants. The subjects were identified as to age and grade level. Subjects were placed into the facility from all geographic areas within the state of Texas.

Description of Instrument

Myers-Briggs Type Indicator (MBTI)

Isabel Briggs Myers developed the MBTI in the 1940s. Based on Jung's theory of personality, it was designed to measure individual preferences for the understanding and processing of information. Form G of the MBTI was used in this study. Form G contains 126 forced-choice items consisting of word pairs, behavior reports, and non-threatening value judgments. Each of the items pertains to one of the four scales as described by the dichotomous descriptors: extraversion/introversion (EI), sensing/intuition (SN), thinking/feeling (TF), or judging/perceiving (JP). The results for each respondent are summed for each dimension of each index separately. The results for each respondent consist of eight numerical values, two for each index. Comparison of these values determines the preference and the strength of the preference. For each scale, the larger of the two numbers determines the individual's preference. Combining all of

the four indicated preferences yields a four-letter descriptor of the individual's type preference. The numerical portion of a score shows how strongly the preference is reported. The subject's scores for each index are then transformed into a continuous score using a chart printed on each of the scoring keys. Continuous scores range from 33 to 161 with 100 serving as the division point separating the two preferences.

In an extensive review of previous studies which investigated the relative independence of the continuous MBTI scales, Carlyn (1977) concluded that "the MBTI measures three dimensions of personality which are relatively independent of each other: extraversion-introversion, sensing-intuition, and thinking-feeling" (p. 463). The SN and JP scales were found to be correlated with values ranging from .3 to .5 (Williams, 1992).

The MBTI has been tested for validity and reliability by the developer and many subsequent researchers. The MBTI has been found to be both valid and satisfactorily reliable. Reliability coefficients have ranged from the mid .50s to the .80s (Carskadon, 1977; Myers, 1962; Stricker & Ross, 1963; Webb, 1964;). Correlational studies with the Gray-Wheelright psychological type questionnaire which

measures Jungian opposites, yielded correlations of .79 and .58 (Williams, 1992). Baurg (1978) reported significant product-moment correlations between the MBTI and the Personality Research Inventory, the Edwards Personal Preference Schedule, the Allport-Vernon-Lindzey Study of Values, and the Strong Vocational Interest Blank. McCaulley (1978) reported that in 100 correlations, either split-half or alpha, only three measures were under .60.

Collection of Data

Permission was obtained from the Texas Youth Commission and from the University of North Texas Human Subjects Review Board. Students were escorted into the testing room and given a brief lesson on psychological type and the uses of Jungian theory. They were then given the option of whether or not to participate in the study. Students who elected to take the MBTI were administered Form G of the MBTI. Students who had difficulty reading had the option of listening to the test on a tape-recorder. Two students chose not to participate in the study. One hundred eighty six students did participate. Answer sheets from five students were not scored because the researcher saw that those participants were bubbling answers without

reading the questions. Seventeen students elected to listen to the tape-recorded version of the MBTI.

Treatment of Data

The MBTI tests were scored by computer at the Center for Applications of Psychological Type. Results were summed separately for each index and consist of eight numerical values, two for each scale. The larger of the two numbers represents the participant's preference. The four letters combine to identify the personality type preference of each subject. Research questions one, two, three, and four were analyzed by means of independent t-tests and chi-square goodness of fit. Research questions five, six, and seven were analyzed via chi-square goodness of fit. Level of significance was set a priori at $p < .05$.

Summary

Adjudicated juvenile delinquents living in a Texas Youth Commission facility in North Central Texas were subjects for this study. The sample was composed of 186 students. Participants were enrolled in grades 9 through 12 and ranged in age from 14 to 20 years. The sample completed the Myers Briggs Type Indicator. Appropriate statistical analyses were performed for each of the research questions.

CHAPTER 4

ANALYSIS OF DATA AND DISCUSSION

Chapter Four presents findings from the research. This chapter contains a presentation of the data analyses. The research questions are listed with statistical findings in reference to the research questions presented in narrative and tabular format. Demographic statistics that describe the subjects are provided.

Research Question One

Is there a difference as measured by the Extraversion and Introversion scale of the MBTI between the scores of juvenile delinquents and those of the general population?

Using the scaled extraversion/introversion scores as measured by the MBTI from the sample data and the normative calibration results of the MBTI, the data were analyzed using two-tailed independent t-tests. The results as summarized in Table 1, indicate that there were significant differences with the preference for introversion greater than extraversion ($t = 3.76$, $df = 180$, $p < .05$) in MBTI scores between juvenile delinquents ($m = 102.14$, $sd = 19.10$, $n = 181$) and the calibration sample ($m = 96.8$).

Chi-square analysis did not show a significant difference in the number of introverts expected from a

sample that size (chi-square=. 105, df=1, critical value = 3.841, $p > .05$). This indicates that although there are approximately the expected numbers of introverts and extraverts represented on the dichotomous scale, the juvenile delinquents had a stronger preference for introversion than expected in the general population.

Table 1

Application of t-Test to MBTI Differences in Means for the Extraversion/Introversion Scale between Juvenile Delinquents and a National Sample

Source	m	<u>sd</u>	n	t	df	p
Juvenile Delinquents	102.14	19.10	181			
				3.76	180	.05
Calibration	96.8					

Research Question Two

Is there a difference as measured by the Sensing and Intuition scale of the MBTI between the scores of juvenile delinquents and those of the general population?

Using the scaled sensing/intuition scores as measured by the MBTI from the sample data and the normative

calibration results of the MBTI, the data were analyzed using two-tailed independent t-tests. The results as summarized in Table 2, indicate that there were significant differences with the preference for sensing greater than intuition ($t = 6.63$, $df = 180$, $p < .05$) in MBTI scores between juvenile delinquents ($m = 89.14$, $sd = 17.17$, $n = 181$) and the calibration sample ($m = 97.6$).

Table 2

Application of t-Test to MBTI Differences in Means for the Sensing/Intuition Scale Between Juvenile Delinquents and a National Sample

Source	m	<u>sd</u>	n	t	df	p
Juvenile Delinquents	89.14	17.17	181			
				6.63	180	.05
Calibration	97.6					

A chi-square analysis showed a significant overrepresentation of sensing types and underrepresentation of intuitive types ($\chi^2 = 14.390$, $df = 1$, critical value = 3.841, $p < .001$). This could be interpreted to mean that more juvenile delinquents rely on their senses rather

than intuition to gather information than would be expected in the general population, and they rely on their senses rather than intuition to a stronger degree than does the general population.

Research Question Three

Is there a difference as measured by the Thinking and Feeling scale of the MBTI between the scores of juvenile delinquents and those of the general population?

Using the scaled thinking/feeling scores as measured by the MBTI from the sample data and the normative calibration results of the MBTI, the data were analyzed using two-tailed independent t-tests. The results as summarized in Table 3, indicate that there were significant differences with the preference for thinking greater than the preference for feeling ($t = 2.29$, $df = 180$, $p < .05$) in MBTI scores between juvenile delinquents ($m = 88.34$, $sd = 19.17$, $n = 181$) and those of the general population.

Chi-square analysis did not show significant overrepresentation of thinking types over feeling types in the sample ($\chi^2 = 1.574$, $df = 1$, critical value = 3.841, $p > .05$). This would indicate that although there was not a significant overrepresentation of thinkers, there was generally a higher preference for thinking and lower

preference for feeling than would be expected in the general population. This indicates that juvenile delinquents tend to base their decisions on logic and reasoning rather than considering values or the effect that their actions will have on others.

Table 3

Application of t-Test to MBTI Differences in Means for the Thinking and Feeling Scale Between Juvenile Delinquents and a National Sample

Source	M	<u>Sd</u>	N	T	Df	P
Juvenile Delinquents	88.34	19.17	181			
				2.29	180	.05
Calibration	91.6					

Research Question Four

Is there a difference as measured by the Judging and Perceiving scale of the MBTI between the scores of juvenile delinquents and those of the general population?

Using the scaled judging/perceiving scores as measured by the MBTI from the sample data and the normative

calibration results of the MBTI, the data were analyzed using two-tailed independent t-tests. The results as summarized in Table 4, indicate that there were not significant differences between the preference for judging and perceiving ($t = 1.64$, $df = 180$, $p < .05$) in MBTI scores between juvenile delinquents ($m = 103.85$, $sd = 22.58$, $n = 181$) and the calibration sample ($m = 106.6$).

Table 4

Application of t-Test to MBTI Differences in Means for the Judging/Perceiving Scale Between Juvenile Delinquents and a National Sample

Source	m	sd	n	t	df	p
Juvenile Delinquents	103.85	22.58	181			
				1.64	180	.05
Calibration	106.6					

Chi-square analysis showed a significantly greater number of perceiving types than could be expected in the general population along with a corresponding lesser number of judging types than could be expected in the general population ($\chi^2 = 6.251$, $df = 1$, critical value = 3.841,

$p < .02$). This would indicate that more juvenile delinquents act impulsively rather than in a planned, systematic way than would be expected in the general population.

Research Question Five

Is there a difference in temperament, as measured by the MBTI, between the type indicators of juvenile delinquents and those of the general population?

The data were analyzed via chi-square goodness of fit to determine if there were differences in temperament, as measured by the MBTI, between juvenile delinquents and those of the general population. The general population estimate used was the Consulting Psychologists Press (CPP) estimate (Hammer and Mitchell, 1996). After comparing the sampling procedure for several population estimates, Hammer and Mitchell reported that the CPP norms are the closest approximation currently available to a national representative sample of MBTI types. Table 5 shows the chi-square goodness of fit analysis comparing the temperament types of the current sample with the CPP Adult Male Norms as reported in Hammer and Mitchell. The chi-square analysis revealed that there were significant results (chi-square = 35.98, degrees of freedom = 3, critical value = 7.815). There was a significant underrepresentation of Intuitive-

Thinking temperaments ($R=-2.55$) and a significant overrepresentation of Sensing-Perceiving temperaments ($R=5.15$).

Table 5

Chi-Square Analysis of Temperaments Between Juvenile Delinquents and the General Population

Temperament	Norm %	Outcome	Expected	O-E	(O-E) squared	(O-E) sq./E	R
NF	14.0	17	25.340	-8.340	69.556	2.745	-1.657
NT	21.5	23	38.915	-15.915	253.287	6.509	-2.551
SJ	43.2	71	78.192	-7.192	51.725	0.662	-0.813
SP	21.2	70	38.372	31.628	1000.330	26.069	5.106
Chi-square =						35.984	

This analysis reveals that there are more juvenile delinquents with a Sensing-Perceiving temperament than would be expected from a general population sample. Keirsey and Bates (1996) report that people with a Sensing-Perceiving temperament tend to be more impulsive, act without considering consequences, are more daring and adventuresome, and are more spontaneous than other temperament types.

Research Question Six

Is there a difference in function pairs, as measured by the MBTI, between the type indicators of juvenile delinquents and those of the general population?

The data were analyzed via chi-square goodness of fit to determine if there were differences in function pairs, as measured by the MBTI, between juvenile delinquents and those of the general population. Table 6 shows the chi-square goodness of fit analysis comparing the function pairs of the current sample with the CPP Adult Male Norms as reported in Hammer and Mitchell (1996). The chi-square analysis revealed that there were significant results (chi-square = 15.88, degrees of freedom = 3, critical value = 7.815). There was a significant underrepresentation of intuitive-thinking function pairs ($R=-2.55$) and a significant overrepresentation of sensing-thinking function pairs ($R=2.57$).

More juvenile delinquents have the sensing-thinking function pair and fewer juvenile delinquents have the intuition-thinking function pair than would be expected in the general population. This indicates that more juvenile delinquents tend to function based on information gathered from senses rather than intuition. This finding could be a

result of the severe overrepresentation of sensing types revealed discussed in Research Question Two.

Table 6

Chi-Square Analysis of Function Pairs Between Juvenile Delinquents and the General Population

Function Pairs	Norm %	Outcome	Expected	0-E	(O-E) squared	(O-E) sq./E	R
NF	14.0	17	25.340	-8.340	69.556	2.745	-1.657
NT	21.5	23	38.915	-15.915	253.287	6.509	-2.551
ST	47.1	109	85.251	23.749	564.015	6.616	2.572
SF	17.4	32	31.494	0.506	0.256	0.008	0.090
Chi-square =						15.878	

Research Question Seven

Is there a difference in personality type preference, as measured by the MBTI, between the type indicators of juvenile delinquents and those of the general population?

The data were analyzed via chi-square goodness of fit to determine if there were differences in personality type preferences, as measured by the MBTI, between juvenile delinquents and those of the general population. Table 7 shows the chi-square goodness of fit analysis comparing the personality types of the current sample with the CPP Adult Male Norms as reported in Hammer and Mitchell (1996). The chi-square analysis revealed that there were significant

results (chi-square = 50.40, degrees of freedom = 15, critical value = 24.996). There was a significant overrepresentation of ISTP types (R=2.584) and a significant overrepresentation of ESTP types (R=5.008).

Table 7

Chi-Square Analysis of Personality Type Preferences Between Juvenile Delinquents and the General Population

TYPE	Expected Percent	Outcome	Expected d	O-E	O-E squared	O-E sq./E	R
ISTJ	19.4	32	35.114	-3.114	9.697	0.276	-0.526
ISFJ	6.3	11	11.403	-0.403	0.162	0.014	-0.119
INFJ	2.0	1	3.620	-2.620	6.864	1.896	-1.377
INTJ	4.8	6	8.688	-2.688	7.225	0.832	-0.912
ISTP	8.7	26	15.747	10.253	105.124	6.676	2.584
ISFP	2.3	8	4.163	3.837	14.723	3.537	1.881
INFP	4.5	10	8.145	1.855	3.441	0.422	0.650
INTP	6.5	7	11.765	-4.765	22.705	1.930	-1.389
ESTP	6.2	28	11.222	16.778	281.501	25.085	5.008
ESFP	4.0	8	7.240	0.760	0.578	0.080	0.282
ENFP	6.0	5	10.860	-5.860	34.340	3.162	-1.778
ENTP	6.7	6	12.127	-6.127	37.540	3.096	-1.759
ESTJ	12.9	23	23.349	-0.349	0.122	0.005	-0.072
ESFJ	4.7	5	8.507	-3.507	12.299	1.446	-1.202
ENFJ	1.5	1	2.715	-1.715	2.941	1.083	-1.041
ENTJ	3.5	4	6.335	-2.335	5.452	0.861	-0.928

Chi-square = 50.40

0

These findings indicate that the overrepresentation of a preference for sensing, thinking, and perceiving is independent of extraversion or introversion. The

combination of preferring to use senses rather than intuition to gather information, basing decisions on logic rather than feelings, and acting in a spontaneous rather than planned way leads youths to act in manner that can result in adjudication. This is without regard as to whether the youth finds strength to act from within or from others.

Summary

The purpose of this study was to identify and explore the personality characteristics of juvenile delinquents and to compare those characteristics with a normative general population. Chapter Four presented the data analyses for seven research questions. Significance was set a priori at the .05 level. In research questions one through four, significant differences were found in the extraversion/introversion, sensing/intuition, and thinking/feeling index for MBTI results comparing the juvenile delinquent sample to a normative calibration sample. Specifically, introverts, sensing types, and thinking types were overrepresented while extraverts, intuitive types, and feeling types were underrepresented. Chi-square analysis also indicated an overrepresentation of

sensing types over intuitive types and judging types over perceiving types.

In research questions five and six, significant differences were found in temperament and function pairs between juvenile delinquents and the normative group. Intuitive-thinking temperaments were underrepresented. Sensing-perceiving temperaments were overrepresented. For function pairs, intuitive thinkers were underrepresented among juvenile delinquents and sensing thinkers were overrepresented.

In research question seven, significant differences were found in personality type between juvenile delinquents and the general population. ESTP and ISTP types were both overrepresented in the juvenile delinquent sample as compared to what could be expected in the general population.

Significant differences were found in personality types among juvenile delinquents as compared to the general population. ISTP and ESTP types were both significantly overrepresented. Chapter Five will summarize and present conclusions based on the findings and will present recommendations for future research.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS AND IMPLICATIONS, RECOMMENDATIONS FOR FURTHER RESEARCH, AND PERSONAL REFLECTIONS

Chapter Five consists of a summary of findings, conclusions and implications of the study. The chapter concludes with a list of recommendations for future research based upon the results of this study.

Summary of Findings

The purpose of this study was to identify and explore the personality characteristics of juvenile delinquents. Emphasis was on identifying and comparing these characteristics, as measured by the Myers-Briggs Type Indicator (MBTI), with those of the general population to determine if there were any significant differences.

Subjects were juvenile delinquents who were adjudicated into the care of the Texas Youth Commission and were currently enrolled in a Texas Youth Commission facility in North Texas. Subjects were enrolled in grades 8 through 12 and ranged in age from 14 to 20. The convenience sample for this study was composed of 186 students matriculated into the school at the above facility. The researcher administered Form G of the MBTI.

The MBTI was computer-scored by the Center for Application of Psychological Type. Data were analyzed by means of chi-square goodness of fit and independent t-tests for differences in means. Level of significance for all tests was set a priori at $p < .05$.

Specific research questions were formulated and analyzed as follows:

For Research Question 1 differences in extraversion and introversion, as measured by the scaled scores of the MBTI, between juvenile delinquents and the general population were analyzed. The data indicated that there were differences in the MBTI scores of juvenile delinquents and the norm group. The extraversion/introversion preference, as measured by the MBTI, indicated that juvenile delinquents were more introverted than the norm group.

A preference for introversion has been found disadvantageous in educational settings. Fourqurean, Meisgeier, Swank, and Murphy (1988) found a preference for extraversion to be advantageous for academic ability and achievement. Williams (1992) reported that younger children labeled as gifted and talented were usually extraverts and

children with learning disabilities were usually introverts.

Differences in sensing and intuition, as measured by the scaled scores of the MBTI, between juvenile delinquents and the general population were analyzed in Research Question 2. The t-test indicates that juvenile delinquents have a higher preference for sensing than the calibration sample. Additionally, chi-square analysis showed an overrepresentation of sensing types. McCaulley and Natter (1980) reported that the sensing/intuition scale is the most consequential for educational programs because education relies so heavily on data intake. Myers and McCaulley (1987) reported that special education students preferred sensing to intuition. Fourqurean, Meisgeier, Swank, and Murphy (1988) said that a preference for intuition was advantageous for academic ability and achievement. Myers and McCaulley also reported that intuitives have a relative advantage over sensing types because their interests more closely match traditional academic tasks.

The analysis in Research Question 3 examined differences in thinking and feeling, as measured by the scaled scores of the MBTI, between juvenile delinquents and

the general population. The data indicated that there were differences in the MBTI scores of the juvenile delinquents and the norm group. The data indicate, as measured by the MBTI, that the juvenile delinquents show more of a preference for the thinking index and less preference for the feeling index than did the calibration sample.

A preference for thinking would indicate that juvenile delinquents tend to think logically and sequentially and base their decisions on logical outcomes rather than value beliefs or consideration of others. Thinking types tend to not consider the other person and the effects their own actions have on others when seeking a course of action. Feeling types base their decisions on their value system and how their action will affect others rather than on analysis and logic.

An examination of differences in judging and perceiving, as measured by the scaled scores of the MBTI, between juvenile delinquents and the general population was undertaken for Research Question 4. The data indicated that there were no differences in the MBTI scores of the juvenile delinquents and the norm group. The data indicate, as measured by the MBTI, that the juvenile delinquents show about the same preference for judging and perceiving as did

the calibration sample. However, chi-square analysis showed an overrepresentation of perceiving types. Additionally, the two most often occurring personality types in the juvenile delinquent sample, ISTP and ESTP, were both perceiving types.

A judging person "is concerned with making decisions, seeking closure, planning operations, or organizing activities" (Myers & McCaulley, 1985, p. 14). The judging attitude is the preference for a planned, decided, orderly way of life. Contrarily, the perceiving attitude is a preference for living life in a spontaneous and flexible way. Whether more youths with a preference for perceiving end up in jail because they live spontaneously and tend to take risks or whether fewer youths with a preference for judging are incarcerated because they plan out their crimes better is unknown.

The fact that more perceiving types are juvenile delinquents does have implications for education and rehabilitation. Myers and McCaulley (1987) report that judgers have an advantage in education because they are better able to focus their energies and persist with a task than their perceiving counterparts.

Differences in temperament as measured by the MBTI between juvenile delinquents and the general population were analyzed in Research Question 5. The data indicate that relatively fewer juvenile delinquents had the NT temperament while relatively more juvenile delinquents had the SP temperament when compared to the normative data.

Keirsey and Bates (1984) reported that people with SP temperaments were the most spontaneous. They value freedom and spontaneity. They also act on impulse and enjoy playing and being free of constraints. Paradoxically the spontaneity and impulsiveness that lands them in jail makes it more difficult for them to accept the accompanying loss of freedom inherent in incarceration. The one redeeming quality for SPs in prison settings is their ability to adapt that is part of the perceiving preference.

Understanding the NT temperament lends insight into their underrepresentation in the population of juvenile delinquents. Keirsey and Bates (1984) report that NT students value competence. They have a desire to learn, to know, to predict, and to control. This value of competence and thirst for knowledge helps them succeed in school. Their desire to predict could enhance their ability to think about consequences and outcomes of behaviors and

could prevent them from behaving in a manner that would put them at risk of incarceration. Their desire to control may permeate into the area of self-control.

Differences in function pairs as measured by the MBTI between juvenile delinquents and the general population were examined in Research Question 6. The data indicate that relatively fewer juvenile delinquents were intuitive thinkers (NT) while relatively more juvenile delinquents were sensing thinkers (ST) when compared to the normative data.

Both of these function pairs are information gatherers. The sensing thinkers tend to gather information by touching, seeing, smelling, hearing, and tasting. They like things concrete and practical. They are generally logical and analytical. The intuitive thinker seems to somehow just know how things are. The relative likelihood that sensing thinking types are going to be incarcerated rather than intuitive thinking types could be related to the natural curiosity of the ST and knowledge of relationships and outcomes of the NT.

Differences in personality type, as measured by the MBTI, between type indicators of juvenile delinquents and those of the general population was the basis for Research

Question 7. The data indicated that there were significantly more ESTP and ISTP types among the juvenile delinquents than would be expected in the general population.

Both of these personality types are spontaneous, curious, and flexible. Neither likes routines or too much structure. They are practical and action-oriented. These characteristics tend to make school a problematic place to be. The ISTP is too practical to grasp the abstract unless the teacher can persuade the student of the importance of the task. The ESTP tends to enjoy school because that was the place to meet friends and participate in activities. However, ESTP types do not tend to care much about the academic and educational activities of the school (Myers, 1987).

Both ISTP and ESTP individuals tend to be daredevils. The ESTP is more animated and excitable while the ISTP tends to quietly and swiftly participate in the daring without considering the consequences. The ESTP will brag and then act out or act out and brag. The ISTP will simply act out. Both of these types also tend to migrate toward people who live on the edge. Both of these types are also blunt and direct. They do not worry about others' feelings

or mince words. They are direct and straightforward, to the point of rudeness, whether they are talking to friends, teachers, parents, administrators, police officers, or judges. Their action-oriented behavior and bent toward thrillseeking tend to get them into trouble while their bluntness and speaking their minds keep them from talking themselves out of trouble.

Conclusions and Implications

Based on the findings of this study, the following conclusions and implications can be drawn. The conclusions are limited to subjects who are similar to those who participated in this study.

1. There is a broad diversity of personality types found within juvenile delinquents. For each index tested, there is at least one representative delinquent student; therefore, no one type is excluded. As with students with emotional disturbances, the one predictable characteristic is unpredictability. Despite the overrepresentation of some personality types, it cannot be said that all juvenile delinquents are the same.
2. The MBTI could be useful in responding to the educational needs of juvenile delinquents. Golay (1979), Hanson and Silver (1984), Lawrence (1993), Myers (1962), and Myers

and McCaulley (1985) identified different ways that an awareness of psychological type can help teachers assist students in the classroom. Knowledge of psychological type and the accompanying learning styles may help teachers to provide an environment conducive to the learning style of the student have been identified. The data from this study may further support the use of the MBTI and learning-style theory.

3. Understanding of type preferences could improve self-understanding among juvenile delinquents. This could help each student develop to the fullest potential and would be beneficial to the student and society. It might also lead to juvenile delinquents having a better appreciation of and more tolerance for persons with widely differing strengths, perspectives, ability levels, and talent possibilities. Understanding personality type preferences can serve to provide a deeper understanding of the mechanisms which drive behaviors (Williams, 1992). Knowledge of type theory and the differences that exist, especially the overrepresentation of sensing perceiving types could help service providers better understand and care for juvenile delinquents.

4. Knowledge of personality type can help promote student achievement in the classroom and can help identify an environment that will enhance the student's functioning on the dorm as well. Through increased understanding of a student's natural preferences for learning and interaction, teachers and corrections officers can provide an environment that maximizes the student's opportunities to learn and rehabilitate.
5. Provision of a non-judgmental language for dialogue such as personality type could be a helpful way to explore the richness afforded by people of various personality types. Gallagher (1990) said that students "need to recognize the shortcomings of their natural dispositions and to value as acquired skills specific techniques to help them become balanced adults" (p. 13).
6. Understanding type preferences can serve to provide a deeper understanding of the diverse mechanisms that drive the behaviors of juvenile delinquent students. Through the uncovering of these dispositions, a new level of understanding about the nature of delinquency could be reached. Similarities between personality type characteristics of adolescents and adults suggest that these characteristics persist into adulthood.

Understanding and helping juvenile delinquents may prevent these young people from becoming adult offenders.

7. Overrepresentation occurs in juvenile delinquents in areas that are linked with education. Fourqurean, Meisgeier, Swank, and Murphy (1988) found that preferences for extraversion and intuition were advantageous in educational functioning. Extraversion and intuition were underrepresented in the juvenile delinquent population with preferences for introversion and sensing being overrepresented.

Recommendations for Further Research

Based on the results and implications of this study, the following recommendations for further research are made.

1. The present study was limited to juvenile delinquents from around the state of Texas who were incarcerated in a state facility in North Texas. A study including juvenile delinquents from other parts of the country for purposes of generalizing the results could verify or reject the findings of the present study.

2. More research is needed using the MBTI not only with juvenile delinquents, but also with students with conduct disorders, social maladjustments, emotional

disturbances and behavior disorders who have not yet been adjudicated to reveal if there are differences in personality types among individuals carrying these labels.

3. A study including girls who have been adjudicated into juvenile detention facilities could reveal personality type preferences of juvenile delinquent girls and how those differ from type preferences of juvenile delinquent boys and from the general population.

4. A study of personality type preferences of teachers and officers who work with juvenile delinquents could reveal similarities and differences that could lead to communication difficulties and other problems of understanding and appreciation between juvenile delinquents and their caretakers.

5. More research is needed to determine if an understanding of personality type could be taught within juvenile detention facilities in a manner such that students' self-esteem and understanding of others are increased.

6. Further research is needed to determine the benefits of understanding type and learning styles within the classroom and in all areas of interpersonal relationships among juvenile delinquents. Can type

understanding help to bridge the gap between juvenile delinquents and their parents, teachers, caregivers, and peers?

Personal Reflections

Without pretending that one piece of research will change the world for juvenile delinquents, and students with emotional and behavioral disorders I feel some important information has been discovered or confirmed. The dismal outcomes for students with emotional and behavioral disorders as well as the recidivism rate of juvenile delinquents has been well documented in numerous works. Some of the main reasons attributed to their pitiful outcomes are lack of social skills, lack of self-esteem, and lack of empathy for others.

A social skills curriculum based on the MBTI, and especially the learning-style component of personality type research could aid in the education of students with emotional and behavioral disorders, but could also be effective with the rehabilitation of juvenile delinquents. Further, as much research exists on interactions of teachers and students with various personality types, research on the personality types of teachers who work with students with emotional and behavioral disorders and

juvenile delinquents could be enlightening. However, to stop with the teachers would be shortsighted. Incarcerated juvenile delinquents often spend only four hours per weekday with teachers. The other 148 hours per week are spent with juvenile corrections officers and other caregivers. Research into the personality types of the corrections officers and other caregivers could also shed light on types of people who work with juvenile offenders. This research could also be used in training of corrections officers in type appreciation. This could help not only in their interactions with the students, but also in their interactions with other employees. Juvenile correctional facilities often have a difficult time keeping enough qualified employees because they tend to be located in small communities with a limited labor pool and there is a high turnover rate. Often the newly-hired juvenile corrections officers spent two weeks in training, worked for two weeks, then quit. Some of the personnel I talked to attributed the high turnover rate to lack of time for proper training. In the rush to fill shifts, new hires were rushed through the training process and placed on the job. Many could not last and make the adjustment without the benefit of proper training. This resulted in a revolving

door of juvenile corrections officers each of whom had undergone training at taxpayer expense. It would be much more efficient to take the time to train them correctly and spend half a day on personality type with a few follow-up sessions than to have to begin again with a new employee each month.

The business world long ago discovered the benefits of type theory in interpersonal relationships. Educators long ago discovered the benefits of the concept of learning styles in the classroom. Counselors long ago discovered the self-esteem enhancing benefits of type theory in explaining individual differences to clients. A combination of these could provide a myriad of benefits to juvenile delinquents, students with emotional and behavioral disorders, and those who provide services to these young people.

The education, rehabilitation, and self-concept of students with conduct disorders, behavior disorders, and emotional disturbances could all be enhanced. It seems that for decades we have known that our results were not good enough. Numerous programs have been tried, many with some success. Perhaps now is the time to make a concerted effort to help our most at-risk students and simultaneously remove an unnecessary burden from society.

APPENDIXES

APPENDIX A

Informed Consent Form

My name is Clark Cavin. I am a doctoral student at the University of North Texas. I am doing a research project in which approximately 200 students who are in Texas Youth Commission are given the Myers Briggs Type Indicator. This indicator will reveal some things about your personality and could help you decide what you would like to do in the future. There are no known risks to people who take the indicator. After you have taken the indicator, all of the answer sheets will be grouped together to insure confidentiality. The indicator will take approximately 30 minutes to 1 hour to complete. Should you choose not to complete the indicator, you may withdraw at any time without penalty, prejudice, or loss of benefit. Should you need to contact me, you can call Clark Cavin at (817) 560-5600 and I will be happy to answer any questions. If you understand the information and wish to participate in the study, please sign below.

I have been informed of the above information and do hereby consent to participate in the study. _____

Student Participant

_____ Date

This project has been reviewed and approved by the University of North Texas Committee for the Protection of Human Subjects (940-565-3940)

APPENDIX B

Myers Briggs Type Indicator Frequencies of Type
Consulting Psychologists Press Adult Male Norms
As Reported by Hammer and Mitchell (1996).
N = 599

ISTJ	ISFJ	INFJ	INTJ
n = 116	n = 38	n = 12	n = 29
(19.4%)	(6.3%)	(2.0%)	(4.8%)
ISTP	ISFP	INFP	INTP
n = 52	n = 14	n = 27	n = 39
(8.7%)	(2.3%)	(4.5%)	(6.5%)
ESTP	ESFP	ENFP	ENTP
n = 37	n = 24	n = 36	n = 40
(6.2%)	(4.0%)	(6.0%)	(6.7%)
ESTJ	ESFJ	ENFJ	ENTJ
n = 77	n = 28	n = 9	n = 21
(12.9%)	(4.7%)	(1.5%)	(3.5%)

APPENDIX C

Myers Briggs Type Indicator Frequencies of Type Juvenile Delinquents N = 181

ISTJ	ISFJ	INFJ	INTJ
n = 32	n = 11	n = 1	n = 6
(17.68%)	(6.08%)	(0.55%)	(6.31%)
ISTP	ISFP	INFP	INTP
n = 26	n = 8	n = 10	n = 7
(14.36%)	(4.42%)	(5.52%)	(3.87%)
ESTP	ESFP	ENFP	ENTP
n = 28	n = 8	n = 5	n = 6
(15.47%)	(4.42%)	(2.76%)	(3.31%)
ESTJ	ESFJ	ENFJ	ENTJ
n = 23	n = 5	n = 1	n = 4
(12.71%)	(2.76%)	(0.55%)	(2.21%)

APPENDIX D

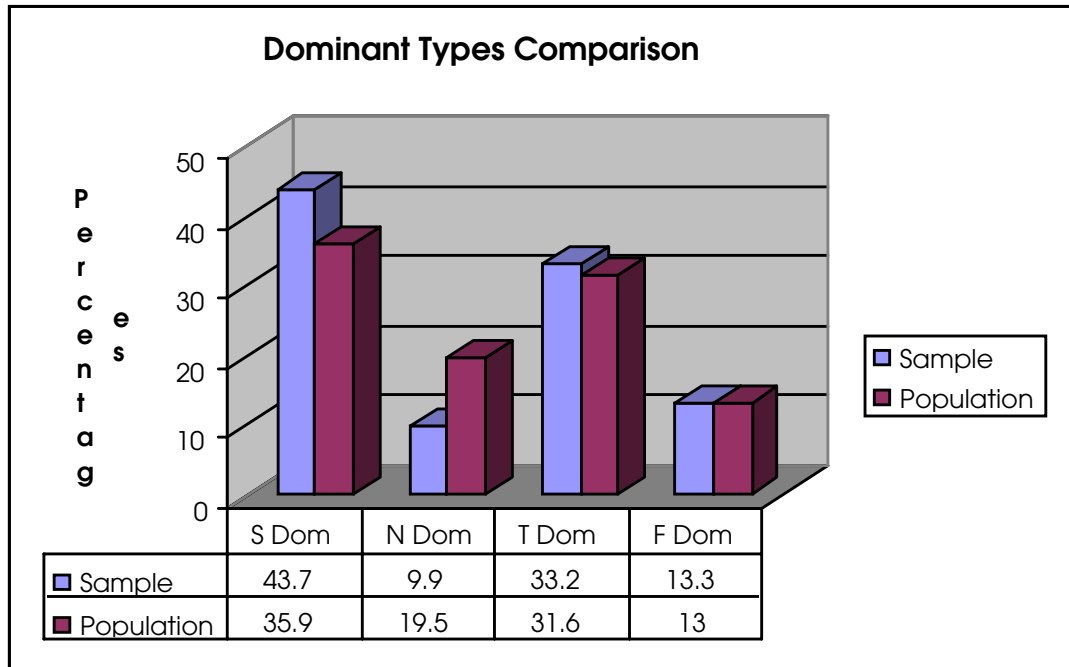
Comparison of Juvenile Delinquents to CPP Adult Male Norms

Juvenile Delinquents (N=181)			Normative Data (N=599)	
Label	N	Percent	N	Percent
E	80	44.2	272	45.4
I	101	55.8	327	54.6
S	141	77.9	386	64.4
N	40	22.1	213	35.6
T	132	72.9	411	68.6
F	49	27.1	188	31.4
J	83	45.9	330	55.1
P	98	54.1	269	44.9
IJ	50	27.6	195	32.6
IP	51	28.2	132	22.0
EP	47	26.0	137	22.9
EJ	33	18.2	135	22.5
ST	109	60.2	282	47.1
SF	32	17.7	104	17.4
NF	17	9.4	84	14.0
NT	23	12.7	129	21.5
SJ	71	39.2	259	43.2
SP	70	38.7	127	21.2
NP	28	15.5	142	23.7
NJ	12	6.6	71	11.9
TJ	65	35.9	243	40.6
TP	67	37.0	168	28.0
FP	31	17.1	101	16.9
FJ	18	9.9	87	14.5
IN	24	13.3	107	17.9
EN	16	8.8	106	17.7
IS	77	42.5	220	36.7
ES	64	35.4	166	27.7
ET	61	33.7	175	29.2
EF	19	10.5	97	16.2
IF	30	16.6	91	15.2
IT	71	39.2	236	39.4

APPENDIX E

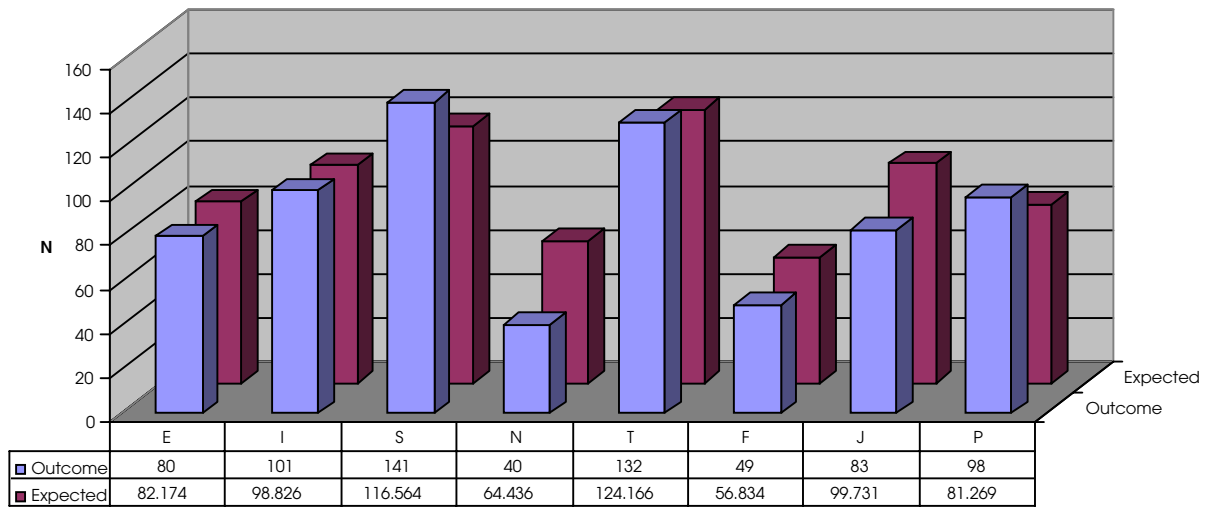
Comparison of Dominant Type of Juvenile Delinquents to CPP Adult Male Norms

Type	Juvenile Delinquents (N=181)		Normative Data (N=599)	
	N	Percent	N	Percent
S dominant	79	43.7	215	35.9
N dominant	18	9.9	117	19.5
T dominant	60	33.2	189	31.6
F dominant	24	13.3	78	13.0



APPENDIX F

Comparison of Dichotomous Preferences



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Understanding personality type preference can serve to provide a deeper understanding of the behaviors that lead to adjudication of juvenile delinquents. A discovery of the types of adolescents who are adjudicated could lead to preventive measures, early detection, and early intervention for students at risk of becoming juvenile delinquents.